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10/511,181	10/14/2004	Jorg Schwarzbich	344/1/083	1991
170 RICHARD M.	7590 08/06/2007 GOLDBERG		EXAMINER	
25 EAST SALEM STREET SUITE 419 HACKENSACK, NJ 07601		,	MCPARTLIN, SARAH BURNHAM	
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	•	3636		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

₽	Application No.	Applicant(s)
~ 6.	10/511,181	SCHWARZBICH ET AL.
Office Action Summary	Examiner	Art Unit
	Sarah B. McPartlin	3636
The MAILING DATE of this communication of the co	on appears on the cover sheet wi	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR IN WHICHEVER IS LONGER, FROM THE MAILI  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communica  - If NO period for reply is specified above, the maximum statutory  - Failure to reply within the set or extended period for reply will, be Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUNIC CFR 1.136(a). In no event, however, may a re- tion.  period will apply and will expire SIX (6) MON' y statute, cause the application to become AB	CATION.  apply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).
Status		
<ul> <li>1) Responsive to communication(s) filed or</li> <li>2a) This action is FINAL. 2b)</li> <li>3) Since this application is in condition for a closed in accordance with the practice u</li> </ul>	This action is non-final.	• •
Disposition of Claims		
4) Claim(s) 1-11 is/are pending in the application Papers  Claim(s) 1-11 is/are pending in the application is/are well is/are allowed.  Solution is/are rejected.  Claim(s) 1-11 is/are rejected.  Solution is/are objected to.  Solution is/are object to restriction	ithdrawn from consideration.	
9) ☐ The specification is objected to by the Ex 10) ☑ The drawing(s) filed on 14 October 2004  Applicant may not request that any objection  Replacement drawing sheet(s) including the 11) ☐ The oath or declaration is objected to by	is/are: a) accepted or b) of to the drawing(s) be held in abeyan correction is required if the drawing(	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority document of the priority document of the priority document of the certified copies of the priority document of the certified copies of the application from the International if * See the attached detailed Office action for the priority document of the priori	uments have been received. uments have been received in A e priority documents have been Bureau (PCT Rule 17.2(a)).	pplication No received in this National Stage
attachment(s) )	48) Paper No(s	ummary (PTO-413) )/Mail Date ıformal Patent Application
) Notice of References Cited (PTO-892) ) Notice of Draftsperson's Patent Drawing Review (PTO-9	48) Paper No(s	i)/Mail iformal

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#### **DETAILED ACTION**

# Information Disclosure Statement

1. The information referred to in the information disclosure statements filed on October 14, 2004 has been considered as to the merits.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claim 1 and 5 are rejected under 35 U.S.C. 103(a) as being anticipated by Klingler (6,746,081). With respect to claim 1, Klinger discloses a seat inlay (Figure 1) comprising an elastic grid having at least two longitudinal bars (3)(3) having hangers (unlabeled) in the form of bent end portions for suspending the inlay in a frame (5) of a seat, and cross bars (2)(6)(9), which connect together the two longitudinal bars (3)(3), are made of "plastic" (column 5, line 43) and are molded to longitudinal bars. A lordosis support (1) having a plate-like support element (unlabeled), located between supporting elements (7), is made of "fibre-reinforced plastic" (column 5, line 46) and is connected to cross bars (2)(6)(9). Please note, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the

prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985.* 

With respect to claim 5, the support element is adapted to be bulged by a bulge mechanism, in the form of a Bowden cable, as described in column 5, lines 58-61.

Klinger discloses all claimed elements with the exception of the lordosis support being formed in one piece with at least one of the cross bars.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have fastened the supporting element to the cross bars by molding the supporting element so as to encapsulate the cross bars since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893)

4. Claims 2-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klingler (6,746,081) in view of Deceuninck (6,152,531). As disclosed above, Klingler reveals all claimed limitations with the exception of longitudinal bars made of metal and coated with plastic at least on a major part of their length, hangars made of plastic and cross bars of at least one of differing shape and bending strength.

Deceuninck discloses longitudinal bars (1) "formed in known manner of paper wrapped or plastic coated steel wire" (column 1, lines 61-62). Bent end sections (unlabeled) of longitudinal bars (1) constitute hangars and are formed of plastic due to

their plastic coating. Cross bars (3) are varied in longitudinal pitch in accordance with the desired support to be provided by the platform element (column 2, lines 1-5).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to coat the longitudinal bars with plastic and vary the pitch of the cross bars disclosed by Klingler as taught by Deceunink. Deceunink states that such teachings are "known" in column 1, line 61 and column 2, line 4. Furthermore, such a modification would improve the life and supporting characteristics of the device.

5. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klingler (6,746,081) in view of Vermilye (4,722,821). As disclosed above, Klingler reveals all claimed elements with the exception of the cross bars being formed in one step in a single injection molding die holding the longitudinal bars as straight bars in longitudinal grooves.

Vermilye discloses a grid construction (Figure 11) formed with wires (70) laid in a groove (unlabeled) of a die (96) in a straight configuration around which plastic (104) crossbars are molded.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use a mold and manufacturing process taught by Vermilye to form the grid structure disclosed by Klingler. Such a manufacturing process is a cost effective way to form a plastic grid over an inner framework.

With respect to claim 11, Klinger, as modified by Vermilye, discloses all claimed elements with the exception of the lordosis support being simultaneously molded in one piece with at least one of the cross bars.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have simultaneously molded the supporting element and the cross bars since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works, 150 U.S. 164 (1893)* 

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klingler (6,746,081) in view of Vermilye (4,722,821), as applied to claim 7, and in further view of JP 01214417 (JP'417). Klingler, as modified, discloses all claimed elements except for bending the longitudinal bars in the mold.

JP'417 teaches such mold with a bending mechanism (see abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a bending mold as taught by Hosoi in order to minimize the setup for producing the lordosis support.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klingler (6,746,081) in view of Vermilye (4,722,821), as applied to claim 7, and in further view of Herbst (US 2005/0016660 A1). As disclosed above, Klingler, as modified, discloses all

claimed elements with the exception of the use of a multi-tiered injection-molding die, which is capable of forming a plurality of grids simultaneously.

Herbst discloses the use of an injection-molding die, which may contain multitiered dies (paragraph [0047]).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use a multi-tiered die as taught by Herbst to form the grid elements. Such a modification will increase the efficiency of the manufacturing process and decrease the floor space required to produce multiple parts at one time.

## Response to Amendment/Arguments

8. The amendment filed on June 25, 2007 has been considered in its entirety.

The Examiner recognizes Applicant's remarks regarding the information disclosure statement and thanks Applicant for pointing out the English-language copy of the International Search Report. A copy of the Applicant's IDS with all references initialed by the Examiner is included with this action.

Applicant argues that replacing cross bars formally formed by metal wires with cross bars molded from plastic and simultaneously molding a supporting element with said cross bars was not obvious at the time the present invention was made because it had been believed that the specific rigidity and elasticity requirements that were imposed on the grid could only be fulfilled with a grid made of metal wires. The Examiner would like to point out that Klinger discloses cross bars (2)(6)(9) wherein "instead of metal wires other elements, for example, plastic profiled sections, preferably

reinforced with glass or carbon fibres, can be used and cables may also be used" (column 5, lines 42-45). Klinger therefore discloses that plastic can be used to form the cross bars of the elastic grid. Independent claim 1 does not require the longitudinal bars to be made of plastic. Independent claim 1 simply requires the cross bars to be made of plastic and molded to the longitudinal bars. The Examiner therefore contends that Klinger anticipates an elastic grid having cross bars that are made of plastic and that are capable of being molded to longitudinal bars (3).

Given the fact that Klinger discloses cross bars made of "plastic profiled sections." preferably reinforced with glass or carbon fibre" (column 5, lines 42-43) and a lordosissupport made from "a fibre-reinforced plastic" (column 5, line 46) the Examiner maintains that it would have been obvious to one of ordinary skill in the art at the time of the instant invention to form these two elements in one piece. The Examiner recognizes that Klinger discloses a support part that is formed separately from and firmly fastened to cross bars by way of mountings (12)(13) to inhibit the separation of the support part from the cross bars. Klinger does not disclose forming these two elements in one piece. The Examiner maintains, however, that forming two elements that are comprised similar materials and are firmly attached together, in a single piece is obvious to one of ordinary skill in the art. Klinger does not teach away from this aspect of the invention. If Klinger were to teach away from the one-piece aspect of the invention, he would disclose a support element that is removably attached to the cross bars and/or made of a different material than said cross bars. Instead, Klinger discloses a support element which is intended to be irremovably connected to the cross bars and

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is constructed of a similar plastic material. The Examiner maintains that it would have been obvious to one of ordinary skill in the art at the time of the instant invention to form the lordosis support (1) with at least one cross bar (2) (9) simultaneously in one step.

#### Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah B. McPartlin whose telephone number is 571-272-6854. The examiner can normally be reached on M-Th 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Sarah B. McPartlin/ Patent Examiner Art Unit 3636

SBM August 2, 2007